

## 64. Fallows, agroforests and forests: should tropical silviculture go beyond the forest margin?

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Over the recent years, studies on small scale, chainsaw logging in a number of countries of West and Central Africa have documented the gap between timber production as recorded in official statistics vs. actual national production. The latter includes both the large-scale, industrial, export-oriented, forestry sector and the small-scale, artisanal one, largely feeding domestic and regional timber markets. In countries such as Ghana and Cameroon preliminary findings indicate that timber informally harvested in a range of agricultural land use units, such as fallows and cocoa-agroforests, contributes to about half of national production. We present the preliminary results of a series of studies conducted in two regions of Cameroon to assess timber stock and production in the rural mosaic and assess the sustainability of present exploitation practices. Results indicate that timber harvesting intensely focuses on, and is rapidly depleting, a handful of useful trees that farmers traditionally maintained on the rural land. Density, diameter distribution and basal area vary significantly by species and across the various agricultural units. Some species regenerate, in particular in the fallow units, but fuel wood extraction and pole production combined to field preparation practices seriously mine the reconstitution of the timber stock and its preservation across the fallow cycles. We conclude that models to join production of forestry and agricultural crops should be developed at the landscape level with a particular focus on the integration of the land uses that represent the largest portion of the rural mosaic, i.e. those with fallows, agroforests and secondary forests. Production and management tradeoffs (e.g. fallow length versus trees growth rates, damages to main crops, competition), and the factors that could enable the adoption of those models (e.g. land and trees tenure, options for alternative land uses) have to be carefully assessed.

### **Keywords :**

on-farm timber, agroforestry, fallow management, secondary forests, small-scale logging

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